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FILED VIA ECFS

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Supplemental Filing in RM-10371, Petition for Rulemaking of the Wireless Ethernet Compatibility Alliance To Permit Unlicensed National Information Infrastructure Devices To Operate in the 5.470-5.725 GHz Band

Dear Ms. Dortch:

The Wireless Ethernet Compatibility Alliance ("WECA") herewith submits, for the Commission's consideration in the above-captioned docket, copies of two recently completed documents. The first, "Parameters for an Aggregate Model Analysis of Sharing Between Radio Local Area Network (RLAN) Devices and Meterorological, Radiolocation and Aeronautical Radionavigation Radars Operating in the Range 5250-5725" ("*Interference Model*"), details WECA's efforts to create an empirical model for analyzing interference issues associated with the deployment of Radio Local Area Networks, as proposed by WECA in RM-10371. The second, "An Aggregate Model Analysis of Sharing Between Radio Local Area Network (RLAN) Devices and Meteorological, Radiolocation and Aeronautical Radionavigation Radars Operating in the Range 5250-5725" ("*Interference Analysis*"), applies the *Interference Model* to the sets of radar parameters set for by the Department of Defense ("DoD") in document USWP8B02/10R2.

WECA believes that the *Interference Model* and the *Interference Analysis* are a critical advance supporting deployment of RLANs at 5 GHz. For the first time, the industry has prepared a comprehensive analysis of the impact of the deployment of RLANs on a full range of government systems at 5 GHz. As the study concludes, even under significantly conservative assumptions, "[f]or most of the sets of radar parameters analysed . . ., the predicted signal received from a future, high density of RLAN devices is found to be below receiver noise, and for many radars, below the –6 dB [interferer to noise ratio] value," *Interference Analysis* at 8. The analysis notes that "[t]he potential interference levels caused by radar systems and seen by RLAN devices is, in the case of high powered, high gain, radar systems, orders of magnitude larger than the potential interference caused by RLANs and seen by the radars," *id.*

WECA looks forward to working with DoD to assist in their understanding of the model and study and to investigate and agree upon technical solutions to remove, fully and finally, the potential for interference in the band as a barrier to moving forward with an additional spectrum allocation for RLANs at 5 GHz.

Should any questions arise concerning this supplemental filing, please do not hesitate to contact Eric DeSilva at 202.719.3182.

Sincerely,

/s/ Eric W. DeSilva

Eric W. DeSilva

Encl: RLAN-Radar Sharing Study
RLAN-Radar Characterization Model

cc: Julius Knapp, Deputy Chief, Office of Engineering & Technology
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